

## JANUARY &amp; FEBRUARY 2004

Dates To Remember

Florida Bull Test Sale.....January 24, 2004  
 Greenwood, FL (see flier)

Master Tree Farmer.....Feb. 3 – Mar.16, 2004  
 UF/ PJC Campus Milton (see flier)

N.W. FL. Beef Conference.....February 5, 2004  
 Marianna, FL (see flier)

Ag. Field Day.....February 12, 2004  
 Pensacola, Langley Bell 4-H Camp (see flier)

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## **Talking Points for Cattle Producers and Beef Consumers on BSE or Mad Cow Disease**

### **BSE**

Bovine Spongiform Encephalopathy a.k.a. Mad Cow Disease is a slowly progressing fatal disease that affects the central nervous system in cattle. The disease is believed to be caused by an abnormal or altered protein called a "prion" in the brain. The disease is found almost exclusively in cattle over 2 years old. The incubation period for this disease ranges from 2-8 years and is always fatal. There is no vaccination available to prevent this disease and there currently is no way to test live cattle for the disease. BSE testing currently is conducted only on brain tissue from slaughtered cattle.

### **The Reason for So Much Concern**

The reason there is such concern about this disease is the possible link between BSE and a rare human disease called Variant Creutzfeldt-Jakob Disease (vCJD). vCJD is a disease of the central nervous system of humans with similar symptoms to BSE. Recent research in England where the disease has been found, supports an association between vCJD and the consumption of products contaminated with nervous system tissue of BSE cattle. The BSE agent has not however, been found in the meat or muscle tissue of infected cattle.

### **Disease Transmission**

The disease is believed to have been transmitted through the feeding of animal by-product feeds, such as meat and bone meal, made from sheep infected with scrapie (a similar disorder in sheep) or from cows with BSE. FDA banned the feeding of animal by-product feeds to cattle in 1997 to prevent transmission of this disease in the US. Also imports of live cattle and cattle products have been banned from countries known to have BSE since 1989.

### **Cases in the US**

Since 1990 USDA has tested 57,352 brain specimens (as of Sept 30,2003) from cattle displaying any possible symptoms of BSE and the cow in Washington was the very first to test positive. USDA has been closely monitoring for this disease for 13 years, so this is not an epidemic but an isolated case.

### **Clinical Signs of the Disease**

Clinical signs of BSE include: temperament changes such as nervousness or aggression, abnormal posture, coordination problems, difficulty in walking or getting up off the ground, decreased milk production, severe muscular twitching, and a loss of body weight despite a good appetite.

### **Safe for the Consumer**

The US Secretary of Agriculture, Ann Veneman gave the following reasons why Americans can be confident in the safety of U.S. beef:

- The BSE agent is not found in meat like steaks or roasts. It is only found in central nervous system tissue, such as, brain or spinal cord.
- All U.S. cattle are inspected by a USDA Inspector or veterinarian prior to harvest. Animals with any signs of neurological disorder are tested for BSE.
- BSE affects older cattle, typically over 30 months of age. The vast majority of the cattle going to market in the U.S. are less than 24 months old.
- The U.S. began a surveillance program for BSE in 1990 and was the first country without the disease within its borders to test cattle for the disease. The surveillance system targets all cattle with any signs of neurological disorder as well as those over 30 months of age and animals that are unable to walk.
- The U.S. banned imports of cattle and bovine products from countries with BSE beginning in 1989.
- The only way BSE spreads is through contaminated feed. The U.S. Food & Drug Administration in 1997 instituted a ban on feeding ruminant-derived meat and bone meal supplements to cattle. This is a firewall that prevents the spread of BSE to other animals if it were present in the U.S.

## Horse Pasture Management

### Establishing Pastures

1. Soil testing should be conducted to determine the fertilization and liming program. Most native Florida soils will require lime for optimum production.
2. A clean, tilled, weed-free seedbed is essential for all perennial crops.
3. For rate, date, and time-to-graze information for each crop, see [Table 1](#).
4. Winter annual legumes, grasses, and summer annual legumes can be overseeded on sods by either broadcast or sod drilling, or they can be seeded into prepared seed beds. When overseeding, the sod should be grazed very heavily, mowed, or burned to remove the top growth. The small grains (rye, wheat, oats, and triticale) may perform poorly when overseeded on a bahiagrass sod unless the sod has been disturbed by disking or chopping. Bahiagrass should be cultivated (disked) to obtain 30 to 50% disturbance in order to provide good seed-to-soil contact and reduce the competition from the bahiagrass.

### Maintaining Pastures

1. Soil testing is needed to develop an efficient fertilization program.
2. Weed control can be accomplished through a combination of grazing management, herbicide applications, and mowing.
3. Manure should be spread with a light drag. Do this during hot, dry weather. Internal parasites will be killed by the hot sun. Mowing areas where horses do not graze and dragging pastures to spread manure piles will improve the quality and the utilization of the pasture.
4. Insects are not usually severe enough to justify insecticide application, but occasional outbreaks can be controlled with chemicals.

Rotational grazing can be one of the most valuable management practices employed. It calls for 2 to 10 pastures which can be grazed in sequential order. This allows the forage to recover in a given pasture while another pasture is being grazed. This helps prevent "sand spots." Having more than one gate and alternating the one used can help prevent these spots from developing near the gates.

Stocking rate is about 2 to 2 1/2 acres of pasture for each horse. This may vary to some degree, depending on location, type of grass, and size of the horse. In general, when the pasture area is less than one acre per horse, exercise becomes the main use of the pasture and its use as a source of feed becomes secondary. **Avoid a situation where there are too many horses on too few acres for too long a period of time.** This results in destruction of the pasture grass and encroachment of weeds.

## Tables

Table 1. Planting guide for forages.

Crop	Planting rate (lb/A)	Planting material	Planting date**	Months from planting to grazing
Summer Grasses				
Bahia	15 - 20	Seed	Mar 15 - Aug 15	3 - 12
Bermuda	1200	sprigs or green tops	Jan 15 - Aug 15	3 - 12
Pearlmillet	24 - 30	Seed	Mar 15 - Jun 30	1 - 2
Small Grains				
Rye	84 - 112	seed	Oct 15 - Nov 15	1 - 2
Wheat	90 - 120	seed	Oct 15 - Nov 15	1 - 2
Oats	96 - 128	Seed	Sep 15 - Nov 15	1 - 2
Triticale	84 - 112	Seed	Oct 15 - Nov 15	1 - 2
Summer Legumes				
Rhizoma Peanut	80 bu.	Rhizomes	Jan 15 - Mar 15	8 -15
Alyceclover	12 - 15	seed	Apr 15 - Jun 30	2

## **Does My Pond Need Lime?**

### **Identifying Liming Needs**

Identifying liming needs can be accomplished by taking either a water or soil sample from the pond. Measuring the total alkalinity of water in the pond is the most effective, and easiest way to determine if liming is necessary. Local county extension offices are often equipped to measure the total alkalinity of a water sample or can assist you with purchasing a test kit of your own, or in sending a water sample to a lab for analysis. Liming is recommended for ponds with a total alkalinity of less than 20 ppm.

Common application rates for limestone are 1 to 2 tons per surface acre. However, a more accurate rate can be calculated by taking a soil sample from the pond bottom and having a laboratory make a recommendation. Collection of soil samples is easiest before ponds are filled, but can be taken in a pond with water. Pond soil samples can be taken from a boat by using a can attached to a long pole. Samples should be collected from the top 6 inches of soil, from numerous locations in the pond. It is recommended that 12 samples be taken from ponds up to 2 acres, and 25 samples be taken from larger ponds. These samples are then thoroughly mixed dried, and at least one pint of soil is sent to the laboratory. Check with your county extension office for information on laboratories.

### **Timing of Application**

Limestone can be added anytime during the production cycle. However it is recommended that application be made during the fall and winter months when fertilizers are no longer being added to the pond. Limestone will take several weeks to complete its impact on the water quality, so application should be at least one month prior to the initiation of a fertilization program in the spring.

### **Method of Application**

Limestone is best applied directly to the pond bottom prior to filling the pond with water. It should be spread evenly over the entire bottom. For large ponds a lime spreading vehicle will make the job easier. A disk harrow can be used to further incorporate the lime into the soil. Applying limestone to ponds which are full of water is more difficult, but can be done without fear of harming the fish. The material should be broadcast evenly over the entire pond surface. For large ponds, a small boat with a plywood platform can be used to carry the lime beyond the reach of shoreline broadcasting; care must be taken to not overload the boat, as a small volume of limestone is extremely heavy ([Figure 1](#)). . Dumping limestone in large piles on the edge of the pond is extremely inefficient and not recommended. For extremely small ponds or tanks, limestone can be dissolved in a bucket of water, and then added to the pond or tank.



Figure 1. Applying lime to a pond from a boat can be effective, but care must be taken not to overload the boat.

## Liming Frequency

The effects of adequate liming will usually last several years in ponds with little or no outflow. Ponds, which frequently discharge water, may have to be limed annually. Total alkalinity and pH should be monitored to determine the necessary frequency of liming.

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The use of trade names in this publication is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product names and does not signify that they are approved to the exclusion of others.

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Sincerely,

John Atkins  
Extension Agent  
Santa Rosa County

## What is Master Tree Farmers?

It's a satellite broadcast intensive forest management course for landowners in the South. Clemson University will serve as host with professionals from throughout the south participating as instructors and presenters. The broadcast will be live from Clemson, South Carolina, and viewing locations around the south will be set up for local involvement and participation. Who's invited? Landowners, land managers and persons considering land ownership who are interested in managing their land for multiple objectives will find this workshop an exceptional opportunity. Participants will learn how to practice sustainable forestry and how to manage the land to meet their objectives.

## When and Where?

Tuesday evenings, 6-9 pm Central, February 3 through March 16, 2004, at the University of Florida, IFAS PJC Campus Milton. Building 4900, Room 4903. For additional information contact John Atkins, Santa Rosa County Extension Service. Phone: 850-675-6654, E-mail: JDAtkins@Mail.IFAS.UFL.EDU

## Registration

Each attendee will pay \$105 for the course. Those sharing materials with a registered attendee will pay \$25. Registrants will receive a notebook with chapters on seven topics. Persons completing six of the seven sessions will receive a certificate and Master Tree Farmer cap. **Please register by January 16, 2004.** *Registrations after January 16 will be \$115 and will be accepted until February 3.*

## Topics

Feb. 3	<b>Forestry Terms and Concepts</b>
Feb. 10	<b>Forest Economics, Taxation and Estate Planning</b>
Feb. 17	<b>Pine Management</b>
Feb. 24	<b>Hardwood Management</b>
Mar. 2	<b>Harvesting and Marketing</b>
Mar. 9	<b>Management Opportunities -Wildlife and Other Alternatives</b>
Mar. 16	<b>Forestry Services and Current Issues</b>

**More details are on-line at [mastertreefarmer.org/](http://mastertreefarmer.org/)**

**Mail registration to:**  
**Florida Forestry Association**  
**P.O. Box 1696**  
**Tallahassee, FL 32302-1696**  
**Or**  
**Phone: 850-222-5646**







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